

## ABSTRACT OF DISCLOSURE

A gas permeable probe for use in an optical analyzer for an exhaust gas stream flowing through a duct or chimney comprises:

- an elongate hollow structure having first and second ends and a side wall, with an optical cavity defined between said first and second ends within said side wall,
- a mounting structure at said first end and adapted for mounting said elongate hollow structure within said duct or chimney,
- a support member at said second end,
- a connecting structure connecting said mounting structure at said first end to said support member at said second end,
- an optical window at said first end permitting a beam of light originating from an optical analyzer to enter into said optical cavity to travel from said first end to said second end,
- a filter forming a part of said side wall, and
- a retroreflector provided at said second end for returning said light beam to said first end of said hollow structure,
- said optical window being releasably mounted at said first end of said elongate hollow structure and/or said retroreflector being releasably mounted at said second end of said elongate hollow structure.